UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,398	11/19/2003	Robert A. Loe	58594US002	7478

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EXAMINER
NELSON, FREDA ANN

ART UNIT	PAPER NUMBER
3628	

NOTIFICATION DATE	DELIVERY MODE
07/23/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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	Application No.	Applicant(s)
	10/717,398	LOE ET AL.
Office Action Summary	Examiner	Art Unit	
	FREDA A. NELSON	3628	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *06 May 2008*.
2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-50* is/are pending in the application.
    4a) Of the above claim(s) *1-29* is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) *30-50* is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a) ☐ All   b) ☐ Some * c) ☐ None of:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____.
      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

The amendment received on May 6, 2008 is acknowledged and entered. Claims 30-31, 36, 40-42 and 47. Claims 1-29 are withdrawn. No claims have been added. Claims 1-50 are currently pending.

Response to Amendments and Arguments

Applicant's arguments filed May 6, 2008 have been fully considered but they are not persuasive.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In response to Applicant's argument that in regards to claim 30, not claim 1, Knight's reference to "digitizing" a business process refers to general utilization of a computer to aid the business process, the Examiner asserts DiRienzo discloses system 10 includes an image scanning and digitizing means 14 to transform the visual image from the medical X-ray film 12 or other documents into digital data, an image data storage and retrieval means 16 to store and selectively transfer digital data upon request, a telecommunication means 18 to selectively receive digital data from the image data storage and retrieval means 16 for transmission to one of a plurality of remote visual display terminals each indicated as 20 upon request from the respective

remote visual display terminal 20 through a corresponding communications network 21

such as a telephone line, satellite link, cable network or local area network such as

Ethernet or an ISDN service for conversion to a visual image for display at the remote

requesting site ([0020]). DiRienzo further discloses a scanner subsystem digitizes

each patient image film and/or document on a high resolution scanner. This digitized

data is transmitted by a local high speed data link to a separate or remote master

storage unit. Patient identification information is read from a standard format on each

file by OCR techniques and efficiently stored with the digitized image data; and

furthermore, *to reduce data rate processing, data compaction or compression* is

accomplished within the scanner subsystem ([0025],[0114]). Therefore, it would have

been obvious to one of ordinary skill in the art at the time the invention was made to

modify the invention of knight to include the feature of DiRienzo in to develop a system,

based on modern technology, that would take provide better service by reducing data

processing and improve data delivery.

In response to Applicant's argument that in regards to claim 37, that Knight

merely describes a system for identifying a process, not the flow of information through

a process, the Examiner respectfully disagrees. Knight discloses server 40 may be

used to composite information for internal and/or external users to view and manage

business processes. For example, an enterprise's business partner may be invited to

use one or more of the enterprise's applications via communication network 30, for such

uses as checking the enterprise's inventory, ordering parts from the enterprise, and

locating components at the enterprise's premises. Advantageously, having the

enterprise's business processes accessible and viewable for business partners

makes the processes more understandable, usable, and powerful. As such, a

composite application can provide an entrance point to a business process in

the intranet of the enterprise. In certain embodiments, the composite application

provides a user-specific, web-enabled view of different business processes, *which can*

be designed so as to provide tools and capabilities necessary for a user to accomplish a

task, and monitor, measure, and manage the process involved. ([0022])

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

1.   **Claims 30-31, 33, 40-41, 47-48 and 50 are rejected under 35 U.S.C. 103(a) as**

being unpatentable over Knight (US PG Pub. 2004/0024622), in view of DiRienzo

(US PG Pub. 2007/0203813).

As per claims 30 and 47, Knight et al. discloses a system comprising:

a computing device (FIGS. 1 and 4); and

a value modeler software module executing on a computing device, wherein the

value modeler software module processes an information flow model that models the

flow of printed information through a process of an enterprise, and calculates a metric of

improvement for the process when at least one information component associated with

the process is digitized by scanning the printed information component to produce a

digitally encoded version of the printed information component and the digitally encoded

version of the printed information is subsequently used within the process in place of the

printed information component (paragraphs [0007],[0016]).

Knight does not expressly disclose one printed information component

associated with the process is digitized by scanning the printed information component

to produce a digitally encoded version of the printed information component and the

digitally encoded version of the printed information component is subsequently used

within the process in place of the printed information component.

However, DiRienzo discloses system 10 includes an image scanning and

digitizing means 14 to transform the visual image from the medical X-ray film 12 or other

documents into digital data, an image data storage and retrieval means 16 to store and

selectively transfer digital data upon request, a telecommunication means 18 to

selectively receive digital data from the image data storage and retrieval means 16 for

transmission to one of a plurality of remote visual display terminals each indicated as 20

upon request from the respective remote visual display terminal 20 through a

corresponding communications network 21 such as a telephone line, satellite link, cable

network or local area network such as Ethernet or an ISDN service for conversion to a

visual image for display at the remote requesting site ([0020]). DiRienzo further

discloses a scanner subsystem digitizes each patient image film and/or document on a

high resolution scanner. This digitized data is transmitted by a local high speed data

link to a separate or remote master storage unit. Patient identification information is

read from a standard format on each file by OCR techniques and efficiently stored with

the digitized image data; and furthermore, *to reduce data rate processing, data*

compaction or compression is accomplished within the scanner subsystem

([0025],[0114]).

      Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to modify the invention of knight to include the feature of

DiRienzo in to develop a system, based on modern technology, that would take

provide better service by reducing data processing and improve data delivery.

      <u>As per claims 31 and 48</u>, Knight discloses the system of claim 30, wherein the

metric comprises a metric to improvement to one of quality, cycle time, productivity,

cost, and revenue for the process of the enterprise when the printed information

component is scanned to produce the digitally encoded version of the printed

information component and the digitally encoded version is subsequently used within

the process of the enterprise([0037]).

      Knight does not expressly disclose one printed information component

associated with the process is digitized by scanning the printed information component

to produce a digitally encoded version of the printed information component and the

digitally encoded version of the printed information component is subsequently used

within the process in place of the printed information component.

      However, DiRienzo discloses system 10 includes an image scanning and

digitizing means 14 to transform the visual image from the medical X-ray film 12 or other

documents into digital data, an image data storage and retrieval means 16 to store and

selectively transfer digital data upon request, a telecommunication means 18 to

selectively receive digital data from the image data storage and retrieval means 16 for

transmission to one of a plurality of remote visual display terminals each indicated as 20

upon request from the respective remote visual display terminal 20 through a

corresponding communications network 21 such as a telephone line, satellite link, cable

network or local area network such as Ethernet or an ISDN service for conversion to a

visual image for display at the remote requesting site ([0020]). DiRienzo further

discloses a scanner subsystem digitizes each patient image film and/or document on a

high resolution scanner. This digitized data is transmitted by a local high speed data

link to a separate or remote master storage unit. Patient identification information is

read from a standard format on each file by OCR techniques and efficiently

stored with the digitized image data; and furthermore, *to reduce data rate processing,*

data compaction or compression is accomplished within the scanner subsystem

([0025],[0114]).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to modify the invention of knight to include the feature of

DiRienzo in to develop a system, based on modern technology, that would take

provide better service by reducing data processing and improve data delivery.

As per claim 33, Knight disclose the system of claim 32, wherein the value

modeler presents a user interface for assigning costs to each of the tasks (see FIG. 1).

As per claims 40-41 and 50, Knight discloses the system of claim 30, wherein the

information flow model comprises a first information flow model that models current

operation of the process, and the value modeler calculates the metric by processing a

second information flow model that models the flow of information through the process if

the information component were digitized (paragraph [0007]); and wherein the value

modeler calculates respective metrics associated with the first information flow model

and the second information flow model, and compares the metrics to determine a

potential benefit if the information component were digitized (paragraph [0016]).

Knight does not expressly disclose the digitally encoded version of the printed

information component is subsequently used within the process in place of the printed

information component.

However, DiRienzo discloses system 10 includes an image scanning and

digitizing means 14 to transform the visual image from the medical X-ray film 12 or other

documents into digital data, an image data storage and retrieval means 16 to store and

selectively transfer digital data upon request, a telecommunication means 18 to

selectively receive digital data from the image data storage and retrieval means 16 for

transmission to one of a plurality of remote visual display terminals each indicated as 20

upon request from the respective remote visual display terminal 20 through a

corresponding communications network 21 such as a telephone line, satellite link, cable

network or local area network such as Ethernet or an ISDN service for conversion to a

visual image for display at the remote requesting site ([0020]). DiRienzo further

discloses a scanner subsystem digitizes each patient image film and/or document on a

high resolution scanner. This digitized data is transmitted by a local high speed data

link to a separate or remote master storage unit. Patient identification information is

read from a standard format on each file by OCR techniques and efficiently

stored with the digitized image data; and furthermore, *to reduce data rate processing,*

data compaction or compression is accomplished within the scanner subsystem

([0025],[0114]).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to modify the invention of knight to include the feature of

DiRienzo in to develop a system, based on modern technology, that would take

provide better service by reducing data processing and improve data delivery.

2.   Claims 32 and 37-39 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Knight (US PG Pub. 2004/0024622), in view of DiRienzo (US PG

Pub. 2007/0203813) , still in further view of Casati et al. (US PG Pub.

2003/0225644).

As per claim 32, Knight does not expressly disclose the system of claim 30,

wherein the value modeler comprises a database that stores data defining the

information flow model as a set of tasks associated with the process, wherein the data

defines relationships based on dependencies between the tasks.

However, Casati et al. disclose many business-related processes depend upon

the execution of pre-defined tasks. Computers and other automated systems are

applied to automating a number of these pre-defined tasks, handling such aspects as:

identification and allocation of resources; time management; inventory control;

accounting procedures; etc. (paragraph [0002]); and the process data is generated by a

process engine 124 configured to gather and store process instance data as process

execution progresses, wherein the process instance data within the store 112 can

include, for example: overall process definitions; specific sub-steps, or

`nodes` within a defined process; process instance input parameters; process

instance output parameters; process instance activation and completion time(s);

process instance priority; and input and output parameters, activation and

completion time(s) and priorities for each node within a process instance (paragraph

[0019]).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to modify the invention of Knight to include the feature

Casati et al. in order to provide a database which stores the data for easy retrieval.

As per claim 37, Knight does not disclose the system of claim 30, wherein the

value modeler computes one or more total costs associated with the information flow

model, and generates a financial report that presents the computed total costs.

However, Casati et al. disclose the process instance data includes data

representing total cost of the process ([0002],[0019]; also see claims 10 and 21).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to modify the invention of Knight to include the feature of

Casati et al. to provide the user with total cost of the process in order for the user to

make a determination whether to automate processes.

As per claims 38-39 and 49, Knight does not disclose the system of claim 30,

wherein the value modeler computes at least one of total hard dollars, total soft dollars,

and total dollars for each of a set of enterprise functions associated with the process;

and wherein the value modeler computes at least one of total hard dollars, total soft

dollars, and total dollars expended during the modeled process.

However, Casati et al. discloses However, Casati et al. disclose the process

instance data includes data representing total cost of the process (see claims 10 and

21).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to modify the invention of Knight to include the feature of

Casati et al. to provide the user with total cost of the process in order for the user to

make a determination whether to automate processes.

3.   **Claims 34-35 are rejected under 35 U.S.C. 103(a) as being unpatentable**

over Knight (US PG Pub. 2004/0024622), in view of DiRienzo (US PG Pub.

2007/0203813), still in further view of Humenansky et al. (US Patent Number

7,072,822).

As per claim 34, Knight et al. do not disclose the system of claim 30, wherein the

data defines a set of enterprise functions involved in the process, and maps the tasks to

the enterprise functions.

However, Humenansky et al. disclose generating a deployment map that associates each of a set of enterprise planning models with a respective set of application servers, wherein each of the enterprise planning models is associated with a different enterprise planning session and defines a plurality of hierarchically arranged nodes to represent an organization of an enterprise; processing jobs associated with the enterprise planning models with the respective sets of application servers according to the deployment map to perform one or more tasks associated with the enterprise planning sessions; receiving input modifying one or more of the enterprise planning models that defines a set of enterprise contributors, wherein each of the contributors is associated with a different slice of the modified enterprise planning model; upon accesses to an enterprise planning system by the contributors, communicating the input and data associated with the respective slices of the modified enterprise planning model to computing devices of the contributors; and processing the input to update the slices of the modified enterprise planning model on the computing devices of the contributors (see claim 1).

As per claims 35, Knight does not disclose the system of claim 30, further comprising graphical design software that illustrates the flow of the information through the process.

However, Humenansky et al. discloses the web pages may include static media, such as text and graphic imagery, as well as conventional input media such as text entry boxes, radio buttons, drop-down menus, and the like, for receiving information from enterprise users 18.

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to modify the invention of Knight to include the feature of

Humenansky in order to provide the user with a visual of the process.

4.   Claims 36 and 43-46 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Knight (US PG Pub. 2004/0024622), in view of DiRienzo (US PG

Pub. 2007/0203813), still in further view of Charisius et al. (US PG Pub.

2002/0075293).

As per claim 36, Knight does not disclose the system of claim 30, wherein the

graphical design software presents a user interface that includes one or more of :

an input region to receive a description of the task; an input region to receive an

elapsed time that specifies a total amount of time that elapses from start to completion

of the task; an input region to receive a loop/branch weight that indicates the

percentage of time the task is actually performed; an input region to receive a total

resource time that indicates a total time expended by a resource during the task;

an input region to receive a resource quantity that indicates a total resources

allocated to the task; an input region to receive a type of resource allocated to the task;

an input region to receive a hard cost associated with the resource; an input region to

receive a percentage of material cost associated with the task; and an input region to

receive a percentage of material hard cost associated with the task.

However, Charisius et al. disclose, for example, FIG. 35 depicts a user interface

3500 displayed by the Client Interface to receive a role profile. In the implementation

shown in FIG. 35, the Client Interface receives a Rolename 3502 (e.g., "Project

Manager") for the role profile via the enterprise affiliate clicking on an "Add" button 3504

and then entering Rolename 3502 in a dialog box 3506 that is displayed by the Client

Interface. In another implementation, the Client Interface may also receive as additional

entries (not shown) to dialog box 3506 a skill and an associated skill level for Rolename

3502 as part of this role profile (paragraph [0135]).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to modify the invention of Knight to include the feature of

Charisius in order to provide the user with visuals.

As per claims 43-45, Knight does not disclose the system of claim 30, further

comprising a digitization repository to store the digitized information component with

other digitized information components; a computer to retrieve the digitized information

components from digitization repository, and dynamically generate display output from

the digitized information components; and wherein the digitization repository comprises:

a file server to store the digitized information components; and a database management

system to provide an index for retrieving the digitized component.

However, However, Charisius et al. disclose, for example, FIG. 35 depicts a user

interface 3500 displayed by the Client Interface to receive a role profile. In the

implementation shown in FIG. 35, the Client Interface receives a Rolename 3502 (e.g.,

"Project Manager") for the role profile via the enterprise affiliate clicking on an "Add"

button 3504 and then entering Rolename 3502 in a dialog box 3506 that is displayed by

the Client Interface. In another implementation, the Client Interface may also receive as

additional entries (not shown) to dialog box 3506 a skill and an associated skill level for

Rolename 3502 as part of this role profile (paragraph [0135]).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to modify the invention of Knight to include the feature of

Charisius et al. in order to provide the user with storage for easy retrieval of digital

information.

As per claim 46, Knight does not disclose the system of claim 45, wherein the

database management system comprises one of a relational database management

system, a hierarchical database management system, a multidimensional database

management system, an object-oriented database management system, and an object-

relational database management system.

However, Charisius et al. disclose in one implementation, WebDAV storage 142

may be a known database, such as Oracle, DB2, MS Structured Query Language

(SQL) storage, or any Java Database Connectivity (JDBC)-compliant database. In this

implementation, WebDAV Server 140 includes a database management system

(DBMS) or a JDBC interface to control access to the WebDAV storage 142 (paragraph

[0084]).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to modify the invention of Knight to include the feature of

Charisius et al. in order top provide the user with a system for managing the database

for easy retrieval.

5.   Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Knight (US PG Pub. 2004/0024622), in view of DiRienzo (US PG Pub.

2007/0203813), still in further view of Ambler et al. (US PG. Pub. 2002/0111989).

As per claim 42, Knight does not disclose the system of claim 41, wherein the

value modeler compares the metrics to determine a potential return on investment if the

information component were digitized; and the digitally encoded version of the printed

information component is subsequently used within the process in place of the printed

information component.

However, DiRienzo discloses system 10 includes an image scanning and

digitizing means 14 to transform the visual image from the medical X-ray film 12 or other

documents into digital data, an image data storage and retrieval means 16 to store and

selectively transfer digital data upon request, a telecommunication means 18 to

selectively receive digital data from the image data storage and retrieval means 16 for

transmission to one of a plurality of remote visual display terminals each indicated as 20

upon request from the respective remote visual display terminal 20 through a

corresponding communications network 21 such as a telephone line, satellite link, cable

network or local area network such as Ethernet or an ISDN service for conversion to a

visual image for display at the remote requesting site ([0020]). DiRienzo further

discloses a scanner subsystem digitizes each patient image film and/or document on a

high resolution scanner. This digitized data is transmitted by a local high speed data

link to a separate or remote master storage unit. Patient identification information is

read from a standard format on each file by OCR techniques and efficiently

stored with the digitized image data; and furthermore, *to reduce data rate processing,*

data compaction or compression is accomplished within the scanner subsystem

([0025],[0114]).

Ambler et al. disclose an underlining foundation of workflow software is that the

computer code for such software has been designed with a set of rules and

processes for the type of activity that a company finds itself in. These rules and

procedures are selected, for instance, such that the company realizes a desirable

degree of return on the company's investment. As such, the software can be proved for

its worthiness to serve a business interest (paragraphs [0009],[0024]).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to modify the invention of Knight to include the feasibility

feature of Ambler et al. to include the scanning system of DiRienzo in order to provide

the user the ability to analyze the feasibility or automating processes and then develop

a system, based on modern technology, that would take provide better service by

reducing data processing and improve data delivery.   .

Examiner's Note

Examiner cited particular pages, columns, paragraphs and/or line numbers in the

references as applied to the claims above for the convenience of the applicant.

Although the specified citations are representative of the teachings in the art and are

applied to the specific limitations within the individual claim, other passages and figures

may apply as well. It is respectfully requested that, in preparing responses, the applicant

fully consider the references in entirety as potentially teaching all or part of the claimed

invention, as well as the context of the passage as taught by the prior art or disclosed

by the examiner.

Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Freda A. Nelson whose telephone number is (571) 272-

7076. The examiner can normally be reached on Monday -Wednesday and Friday,

10:00 AM -6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, John Hayes can be reached on 571-272-6708. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

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USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/F. A. N./
Examiner, Art Unit 3628

/JOHN W HAYES/
Supervisory Patent Examiner, Art Unit 3628